

Section 3

TRANSPORTATION

Introduction

The Transportation Element of this document contains a compilation of objectives, policies, goals, maps and programs to guide the future development of the various modes of transportation in and around Genoa City. This section also compares the Village's transportation policies and programs to state and regional transportation plans.

Transportation Goals, Objectives and Policies

The following section will re-introduce the goals and objectives identified in Chapter 1 of this document as well as offer prescribed policies and programs to achieve the stated goals and objectives of the Community.

Transportation Goals

The Village of Genoa City's transportation policies and programs are set to achieve the following goals:

To maintain a balanced, efficient, safe, and attractive transportation system that allows for the movement of motor vehicles, pedestrians, bicyclists, and transit users through, around, and into the Village. Streets will have well-designed streetscape, including street trees, sidewalks and, where appropriate, well-defined crosswalks.

Transportation Objectives

The following objectives prescribe more specific ways to achieve the aforementioned transportation goals of the Community:

- Minimize conflicts between local and non-local traffic.
- Assure compatibility between road relationships and future development types.
- Coordinate all proposed road improvement efforts with the Wisconsin Department of Transportation, Walworth County, Kenosha County, McHenry County, and all neighboring municipalities.
- Provide and manage transportation improvements to support business, industrial, and residential growth.
- Provide a system of pedestrian trails, walkways, and bikeways that encourages safe and easy circulation throughout existing and future developments within and beyond the Village; and to extend existing trails connecting with the development.
- Require interconnections between commercial and residential projects to allow for pedestrian and vehicular access and to reduce congestion on major roads.

Transportation Policies

The following policies offer a course of action to guide and determine the present and future decisions related to transportation within and around Genoa City:

- Promote and support the development of the “Richmond By-Pass,” and coordinate access with the Village of Richmond, McHenry County, and Walworth County.
- Promote and support an interchange at the intersection of Highway 12 and Twin Lakes Road/110th Street.
- Coordinate improved vehicular access and safety through the extension of Twin Lakes Road to County Highway H and examine the need for the roadway section of Twin Lakes Road north of its intersection with Darling Road.
- Improve vehicular and pedestrian safety at the three-way intersection of Franklin Street, Freeman Street, and County Highway H.
- Improve vehicular safety at the intersection of Deignan Road and County Highway H, through the realignment of Deignan Road.
- Provide a well-integrated, pedestrian environment throughout the community that is designed to enhance the safety, comfort, and convenience of walking and biking.
- Provide for a continuous pedestrian network throughout Genoa City, which may include sidewalks, paths (both formal and informal), and local streets. Such routes should be clearly identified and marked.
- Improve pedestrian crossings in the downtown and at major intersections.
- Establish designated bicycle routes/multi-use paths throughout Genoa City that interconnect with existing routes and facilities, as well as provide access to the downtown, public facilities, residential neighborhoods, parks, and recreation sites/facilities.
- Coordinate bicycle routes/multi-use paths with neighboring communities, county and statewide routes. Encourage adding or resurfacing recreational paths when and where safe and possible.
- Involve residents and surrounding property owners in planning for and designing transportation improvements to ensure that neighborhood character is preserved to the greatest extent possible.
- Promote the development of sidewalks in all new residential development within the Village.

Existing Transportation Facilities

Genoa City's municipal transportation network consists of a combination of federal, state, county, township, and municipal roads totaling over seventeen (17) miles of roadway; over forty (40) miles are located within the planning boundary area. Major roadways such as US Highway 12, County Highway B, County Highway H, and County Highway U all serve the Village and surrounding region. Twin Lakes Road, Walworth Street, and Main Street serve as major east-west roadways within the Village and Carter Street, Freeman Street, and Fellows Street serves as the major north-south Village roadways west of Highway 12. Williams Road, which is located east of and runs parallel to Highway 12, serves as the major roadway for properties located east of Highway 12. Richmond Road, which serves as the eastern planning boundary for Genoa City and as Twin Lake's western municipal boundary, is a major north-south arterial that serves the region.

Roadway Functional Classification System

Roadways have two (2) basic functions, to provide mobility, and to provide land access. For mobility, high speeds and uniform traffic flows are desirable; for land access, low speeds, which are usually accompanied by inconsistent flows, are desirable. More restrictive access controls permit increased mobility and travel at higher speeds in a more uniform manner.

Travel involves a movement through a network of roadways. For transportation planning purposes, as well as for design purposes, roadways are most effectively classified by function to provide for the movement of traffic through this network. Functional classification reflects four (4) distinct stages of trip-making, including primary movement, collection/distribution, access, and termination. To facilitate these movements, four (4) general classes of roadways are recognized: freeways, arterials, collectors, and local streets.

Each element of a functional hierarchy serves as a collecting/distributing facility for the next higher element of the system, and each functional class should intersect with facilities of the same and adjacent classifications. The characteristics of the facilities within each roadway classification are described below.

Freeways: Freeways provide a high-degree of mobility, with access limited to grade separated interchanges, which are spaced at least one (1) mile apart, to preserve the high-speed (typically 45-65 mph), high-volume characteristics of the facility. These facilities are typically part of the state or federal highway system. U.S. Highway 12 is the only freeway that adjoins Genoa City.

Arterials: Major arterials are intended to provide a high-degree of mobility and function as the primary travel routes for vehicles entering, leaving, and passing through urban areas. They are generally located about one (1) mile apart to form a grid street system; are intended to carry high volumes of traffic at high operating speeds (typically 35-45 mph); and have adequate capacity to operate at high levels of service. Although major arterials do interconnect with such major developments such as central business districts, large commercial centers, industrial parks, and residential areas, access management is essential to preserve capacity. Signalized intersections should be spaced far enough apart (typically ½ mile as a

minimum) to permit efficient two-way progression of traffic, and left-turn and right-turn lanes should be provided at these intersections to ensure that traffic capacity and levels of service are maintained.

The following facilities are classified as arterials in Genoa City:

Classified Arterials	
County Highway B (Main Street)	South Road
County Highway H	Freeman Street
Twin Lakes Road/110 th Street	Sumner Street
Richmond Road	Walworth Street
Daisy Drive	

Collectors:

The collector street system is designed to support the arterial network. Collector streets are generally located at the ½-mile points within the grid system and consist of medium capacity, medium volume streets that serve to link high-level arterial streets to lower level local streets. Operating speeds are typically lower on collectors than on arterials and have limited continuity, which deters through traffic but still provides for some direct land access, but to a more limited degree than local streets.

The following facilities are classified as collectors in Genoa City:

Classified Collectors	
Wild Rose Road	Darling Road
Williams Road	Elizabeth Road
Thunderbird Road	County U (Carter Street)
Hunters Ridge Drive	Fellows Street
Franklin Street	

Local Streets:

Local streets provide direct land access. Movement on local streets is incidental and involves traveling to or from a collector facility. Therefore, trip lengths on local streets are typically short, and as a result, volumes and speeds on these streets are typically low. The local street system is also typically planned to ensure that all neighborhoods are accessible by at least two (2) routes for emergency and service vehicles.

The role of the local street system is to carry traffic and provide for safe and convenient access to housing areas and other land uses. Local streets also serve a social function for residents. Neighborhood streets are often a place where neighbors can meet, children can play, or residents can bike or walk. These two (2) roles can, however, create potential conflicts.

The following guidelines should be considered for uses on local streets:

- o Local streets should be protected from through traffic;
- o Should operate at speeds below 30 mph; and

- o Should be protected from parking unrelated to residential or commercial activities of the neighborhood.

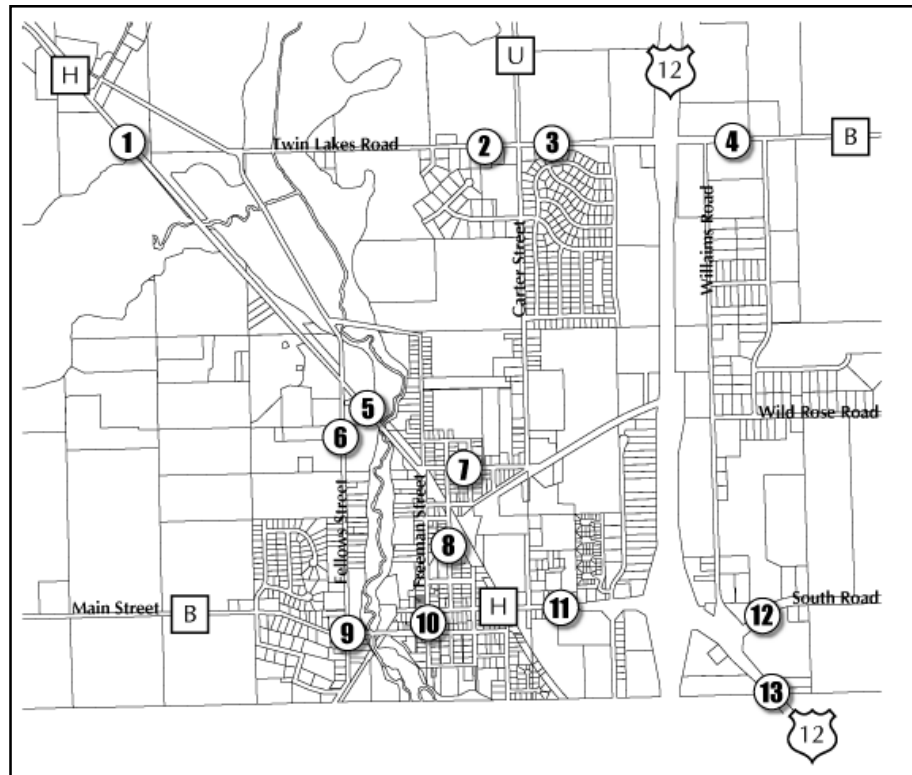
In order to achieve the above uses, street layout, design, and control should express and reinforce the street function, and the overall street network for the community should include higher-capacity streets capable of accommodating through traffic.

Existing Traffic Conditions and Roadway Deficiencies

While traffic volume is not a specific element of functional classifications, it provides a general indicator regarding roadway function. Hourly traffic data was obtained from the Wisconsin Department of Transportation.

As would be expected, the highest traffic counts in Genoa City are on U.S. Highway 12 and on Walworth Street. Furthermore, it appears that all roads have adequate capacity to handle existing traffic volumes. However, as development occurs, intersection and other enhancements may be needed to maintain a safe and efficient roadway system.

Exhibit of Annual Average Daily Traffic Counts in Genoa City



ID	Vehicles per Day (Average)	Traffic Count Location
1	3,100	County Highway H, north of Fellows Street
2	800	County Highway B, west of County Highway U

3	1,200	County Highway B, east of County Highway U and west of US Highway 12
4	1,500	County Highway B, east of US Highway 12
5	2,500	County Highway H, south of Fellows Street
6	1,100	Fellows Street, south of County Highway H and north of County Highway B
7	1,100	Franklin Street, east of Freeman Street and west of County Highway U
8	3,600	Freeman Street, north of Walworth Street and south of Franklin Street
9	2,900	County Highway B and Fellows Street
10	3,300	Fellows Street, north of Main Street and south of Walworth Street
11	5,200	Walworth Street, east of Freeman Street and west of US Highway 12
12	2,000	South Road and US Highway 12
13	12,200	US Highway 12 and the State Line

Source: Wisconsin Department of Transportation, Transportation District 2

Transit and Railway Service

Prior to 1965, the Chicago-Northwestern Railroad operated a freight and passenger service branch line through Genoa City, providing twice a day commuter service to and from Chicago. Additionally, a second line extended from Genoa City to Hebron, Illinois, with once a week freight service. In 1965, the Chicago Northwestern Railroad removed the tracks and sold the right-of-way to the Wisconsin Department of Natural Resources. Since 1965, there has been no transit service.

Currently, there are no bus stations in existence and none planned for within the Village of Genoa City's limits. However, park-and-ride lot 64-10 is provided to the northwest of the interchange of US 12 and the Wisconsin/Illinois State Line. Such facility offers both free parking and overnight parking and is in place to encourage carpooling and/or vanpooling.

Air Transportation Services and Airports

Vincent Airport serves Genoa City and Kenosha County and is owned by Mrs. John D. Vincent. The turf runway extends for 1,775 feet. The facility is at an elevation of 880 feet and is generally located 3/4^{ths} of a mile east of the intersection of Highway 12 and Twin Lakes Road/110th Street, in Kenosha County.

General Mitchell International Airport (MKE), which is the largest airport in Wisconsin, is located approximately fifty (50) miles northeast of Genoa City; O'Hare International Airport, which offers more connections to more cities, more often than any other airport in the world, is located approximately sixty (60) miles southeast of Genoa City; and the Northwest Chicagoland Regional Airport at Rockford (RFD), which is presently ranked as the twenty-third largest cargo airport in the nation, is located approximately (fifty) 50 miles southwest of Genoa City.

Truck Transportation

U.S. Highway 12 is the only designated truck route within the Village of Genoa City's planning boundary. Whereas there are no local trucking agencies in Genoa City, due to its location along U.S. Highway 12, it has access to several Interstate Common Carriers. Additionally, a State Rest Area containing 17 parking stalls is located along U.S. Highway 12, just north of the Wisconsin/Illinois State Line.

Water Transportation

No public water transportation is provided in the Village.

Comparison to Regional and State Plans

"A Regional Freeway System Reconstruction Plan for Southeastern Wisconsin," which was adopted in May of 2003 by the Southeastern Wisconsin Regional Planning Commission as an amendment to the regional transportation plan, had a stated purpose of developing a broad understanding of current and future freeway system needs and, based on that understanding, building a regional consensus as to how to best approach the inevitable reconstruction of the most heavily used portions of the regional transportation system. As related to Genoa City, this plan identifies the construction of a new half interchange at the intersection of Highway 12 and Walworth Street/South Road - or the planned location of the "Richmond By-Pass." It further identifies the eventual reconstruction or replacement of the segment of U.S. Highway 12 between Genoa City and Elkhorn. The anticipated timeframe of this improvement is between the years 2021 and 2030. No other traffic improvements have been identified which will have a direct impact on either the existing or planned transportation network within the Village.

In October of 2003, the Southeastern Regional Plan Commission issued a Preliminary Draft of "A Transportation Improvement Program for Southeastern Wisconsin: 2004-2006," which provides a listing of all arterial highway and public transit improvement projects proposed to be carried out by State and local governments over the next three (3) years (2004 to 2006). As presented in the report, no new transportation improvement programs are planned that will have a direct impact on the Village of Genoa City.

Future Transportation Improvements and Recommendations

Several major roadway improvements are planned for Genoa City, including the development of the "Richmond By-Pass," which has a planned intersection location with County Highway H, just south of Highway 12, and roadway improvements to South Road, Williams Road, and Wild Rose. Along with these projects, the Future Land Use Plan recommends the following additional improvements:

1. The westerly extension of Twin Lakes Road to intersect with County Highway H;
2. The removal of the segment of Twin Lakes Road north of its intersection with Darling Road (this is contingent upon Point 1);
3. The realignment of Deignan Road in order to create a 90 degree intersection with County Highway H;
4. The removal of the segment of Deignan Road east of its intersection with Thunderbird Road (this is contingent upon Point 3);

5. The development of a new interchange at the intersection of Highway 12 and Twin Lakes Road/110th Street. This intersection will provide both northbound and southbound access to Highway 12 from Twin Lakes Road/110th Street;
6. The development of a north-south road between the Walworth/Kenosha County Line and Richmond Road, which will provide access between Twin Lakes Road/110th Street and Wild Rose Road/119th Street;
7. Improvement of the existing three-way intersection of County Highway H, Franklin Street, and Freeman Street. Recommended improvements include the development of a cul-de-sac along Freeman Street (south of Gifford Street and north of Franklin Street), resulting in a two-way intersection with Franklin Street and County Highway H;
8. Construction of Partridge Drive south to connect to Franklin Street; and
9. A future “circular” roadway connecting the northerly terminus of Gregory Drive (just north of its intersection with Oak Ridge Lane) to the intersection of Gregory Drive and Ann Street (on the south) – approximately 2,000 feet west of and parallel to Gregory Drive.
10. Connect North and South Carter Streets.
11. Work with Walworth County to reconstruct Carter Street (CTH U) and Franklin Street (CTH B) with curb and gutter.

Other improvements include the development of a Genoa City walkway and bikeway plan that establishes clear pedestrian and bicycle networks throughout the Village; the repair, replacement, and creation of new sidewalks or pedestrian paths throughout the Village; requiring the development of sidewalks in all new developments within the Village limits; and creating a more “pedestrian-friendly” environment within the downtown through the incorporation of street furniture, improved cross-walks, directional/informational signage, bike racks, etc.